National Aeronautics and Space Administration
Lyndon B. Johnson Space Center
Houston, Texas

STS-83 preview

STS-83 is schedule to lift off April 3 on a Microgravity Science Laboratory mission. Story on Page 3.

Earth Day update

A variety of activities are in the works for JSC's Earth Day on April 22. Story on Page 4.

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JSC Photo 97-03791 by Robert Markowitz

From right, Boeing's Defense and Space Group Space Station Deputy Program Manager Bill Russell greets JSC Director George Abbey, Boeing President Alan Mulally and JSC Associate Director, Technical John Young to Ellington Field last week. Boeing's recently appointed president came to Houston in the new 777 to meet Houston employees.

Boeing president recognizes NASA contributions to aircraft technology

NASA cooperation is helping build bigger and better aircraft said Boeing Defense and Space Group President Alan Mulally when he flew into Ellington Field last week.

Mulally, JSC Director George Abbey and Associate Director, Technical John Young greeted a large crowd of NASA and Boeing employees after taking Boeing's newest 777 airliner for a flyover of JSC.

"Alan, I want to welcome you and the Triple 7 team to Houston," Abbey said. "We appreciate very much you coming down here and bringing a great Boeing product to Houston because we have a great Boeing team here that is working on the space station, which I hope will turn out as good as the Triple 7."

Mulally, named president in February,

Please see **EMPLOYEES**, Page 4

Columbia ready to begin 16-day science mission

The countdown clocks at Kennedy Space Center are scheduled to begin ticking down at 1 p.m. CST on Monday for launch of *Columbia* on the STS-83 Microgravity Science Laboratory mission.

The upcoming 16-day flight will see the crew—Commander Jim Halsell, Pilot Susan Still, Mission Specialists Janet Voss, Mike Gernhardt and Don Thomas along with Payload Specialists Roger Crouch and Greg Linteris—conduct a variety of experiments to examine how various materials and liquids change and behave in the weightless environment of space.

The crew is expected to arrive at KSC's Shuttle Landing Facility around 1:30 p.m. CST on Monday and will spend the final days before launch reviewing flight plans, receiving weather and vehicle briefings and spending time with family members.

Columbia's two and a half hour launch window opens at 1:01 p.m. CST Thursday, April 3. With an on time launch on Thursday, *Columbia* will return to KSC at 6:19 a.m. April 19. Processing work this past week involved the loading of propellants into the orbiter's reaction control system and the start of aft engine compartment close out activities. Ordnance installation also was completed.

During 16 days in low-Earth orbit, the crew will conduct a variety of experiments and test hardware and procedures that will be used on the International Space Station. The Microgravity Science Laboratory will serve as a bridge between short duration work done on previous Spacelab flights and long duration research that will be performed on the space station.

While launch preparations near completion on *Columbia*, work on the other two orbiters supporting active flight operations also is going well. Technicians will close *Atlantis*' payload bay doors on Monday. The orbiter will be moved to the Vehicle Assembly Bldg. next week to be mated to its solid rocket boosters and external tank. Rollout to the launch pad is currently planned for April 9.

Atlantis will fly mission STS-84, the sixth shuttle-Mir mission, in May. Astronaut Mike Foale, who will replace Jerry Linenger on the Russian Mir Space Station, is nearing completion of training in Russia. Foale is expected to return to the U.S. in early April for the final weeks of training with his shuttle crew mates—Commander Charlie Precourt, Pilot Eileen Collins and Mission Specialists Carlos Noriega, Edward Lu, Jean-FranÁois Clervoy, and Elena Kondakova.

Discovery continues to undergo normal post-flight inspections and servicing activities. This week, technicians removed *Discovery*'s main engines and conducted functional checks of the forward reaction control system. *Discovery*'s main engines are scheduled to be installed April 18 for its scheduled mission, STS-85, in July. *Discovery* will carry the CRISTA-SPAS-2 payload.

Structural inspections and modification work on *Endeavour* is complete and the orbiter was scheduled to return to KSC this week atop NASA's 747 Shuttle Carrier Aircraft from the Boeing North American facility in Palmdale, Calif.

New on-line database can reduce trouble-shooting work

JSC employees now have on-line access to some 500 "lessons learned," and can apply them to the work of today and tomorrow.

The new user-friendly database is called the Lessons Learned Information System, or LLIS, now found on the Internet at http://envnet.gsfc.nasa.gov/ll/llhomepage.html

"It is critical to retain hard-earned knowledge from past NASA programs in this period of reinvention, refined customer focus, buyouts and tightening budgets," said Ron Montague, JSC's center data manager. "The LLIS currently emphasizes safety, reliability and quality assurance subjects pertinent to space flight programs. Lessons arising from operations as well as spaceflight are finding their homes in the LLIS."

The LLIS initially has been populated by lessons researched by field centers and the International Space Station program. There are about 500 lessons in the LLIS.

A lesson found in the LLIS will contain a description of the event, responses or corrective actions and evidence of recurrence control. The information is easily searched on key words or categories. Lessons may contain illustrations, photographs and other similar graphics to complement and clarify the text. Users may use lessons as "think tanks" whenever new ideas and approaches are needed.

Users also may contribute lessons to the LLIS. Contributors are expected to be responsible for the technical accuracy. The process for screening lessons is provided and will generally become available to all users within five working days.

The LLIS is fully operational and is available to any NASA employee or contractor. International partners also are beginning to participate in the LLIS.

"While the assurance disciplines have piloted the LLIS concept, there is no reason why other disciplines such as research, engineering, operations, etc., cannot use the LLIS as well," Montague said.

JSC customers who find the LLIS useful in other disciplines or applications are encouraged to coordinate their requirements with Montague or Eric Raynor, the NASA Headquarters data manager.

New zones to protect pedestrians at JSC

Three new pedestrian crossing zones have been established at JSC to help drivers be on the look-out for workers walking around the center.

The zones—which limit vehicles to 20 miles an hour during parts of the day—are on Second Street, Fifth Street and Avenue B. Signs have been installed with flashing lights to identify these areas as pedestrian zones to provide additional safety and increase awareness of pedestrian traffic.

PEDESTRIAN ZONE AHEAD

The locations were selected due to the large number of pedestrians using the crosswalks in these areas. The 20 mph speed limits are in effect Monday through Friday from 7-9 a.m., 11a.m. -1 p.m. and 3:30-5:30 p.m.

The pedestrian zones were created in response to data that showed the majority of all traffic-related Close Call reports involve pedestrian crosswalks. The Executive Safety Committee became concerned for the safety of pedestrians at JSC and formed a Pedestrian Safety Committee, which studied and surveyed pedestrian safety problems and recommended solutions to the Executive Safety Committee. One recommendation was to establish the Pedestrian Crossing Zones.

JSC Photo 97-03761 by Steve Candler

MOON VIEW—Participants in the 28th annual Lunar and Planetary conference, held last week at JSC, attend a poster session at the Gilruth Center. In the March 14 issue of the Space News Roundup, the Internet address of the conference was incorrect. The location to view complete abstracts presented during the conference is: http://cass.jsc.nasa.gov/LPSC97

Crew to talk about chamber test next Monday

Four JSC volunteers will tell what it was like to live and work for 60 days in a special air-tight JSC chamber at 3:30 p.m. Monday, March 31, in Teague Auditorium.

Crew Leader Terry Tri, Project Engineer Karen Meyers, Systems Engineer Fred Smith and Facilities Project Engineer Dave Staat will show a video and slides documenting their chamber stay. The test was the third phase of the Advanced Life Support Program Test Project that recycles air and water.

JSC Director George Abbey and Engineering Director Leonard Nicholson will present awards to team members and share plans for future extended duration tests. For more information, contact Helen Harris at x38413.